INDEX.

ARTICLES MARKED WITH AN ASTERISK ARE ILLUSTRATED.

PAGE

Acetylene, Storing of. (Frag.) 140
" The New Illuminant. V. J. Youmans 786
African Village Scene. (Frag.) 139
Agriculture, Science as a Help to. (Frag.) 426
Air, Compressed, Working in. (Frag.) 569
" Solid. (Frag.) 285
Alaska. (Frag.) 857
Aluminum, Electro-Metallurgy of. (Frag.) 570
American Association, Early Years of the.* W. H. Hale 501
" " The Fourth Buffalo Meeting of the. (Table) .. 845
Americans, Native, The Potter's Art among.* A. D. Le Plongeon ... 646
Animal Intelligence. (Frag.) 424
Antarctic Continent, Unapproachable. (Frag.) 141
Antitoxine, Short Method for Producing. (Frag.) 425
Appalachians, Northern. (Frag.) 281

Badenoch, L. N. Social Insects* 641
Baldwin, J. Mark. The Genius and his Environment 312, 522
Banking System, On Our. L. G. McPherson 327
Banziris, The, of the Congo Basin. F. J. Clozel 673
Birds, The, at Dinner.* H. E. Richards 337
Blake, I. W. Our Southern Mocker 258
Books noticed 129, 272, 413, 560, 703, 846

A. I. C. P. Notes. Vol. I, No. 1, 710.
Addickes, Erich. Kant-Studien, 136.
Aëronautical Annual. James Means, *editor*, 708.
Aikman, C. M. Milk: its Nature and Composition, 277.
Allman, Alphonse. Statesman and Demagog, 420.
American Microscopical Society. Transactions. Vol. XVII, 708.
Austin, L. W., and C. B. Thwing. Physical Measurements, 566.
Bailey, L. H. Plant-breeding, 274.
Beaunis, H., and A. Binet. Année Psychologique for 1895, 853.
Bergen, Mrs. Fanny D. Current Superstitions, 848.
Blair, Thomas S. Human Progress, 850.
Bonney, T. G. Charles Lyell and Modern Geology, 413.
Brittain, John. Teachers' Manual of Nature Lessons, 419.
Bryan, John. Fables and Essays, 566.
Burnet, Margaretta. Zoölogy for High Schools and Academies, 133.
Byars, William V. The Glory of the Garden, 710.
California Academy of Sciences. Proceedings. Vol. V, Part I, 278.
Chamberlain, A. F. The Child and Childhood in Folk-thought, 129.
Chambers, George F. The Story of the Solar System, 563.

Books noticed :

Chester, Albert H. A Dictionary of the Names of Minerals, 853.
Chittendon, H. M. The Yellowstone National Park, 419.
Comey, Arthur M. Dictionary of Chemical Solubilities, 851.
Conant, Charles A. A History of Modern Banks of Issue, 847.
Conant, Levi L. The Number Concept, 852.
Cook, Lady Tennessee C. Essays, third series, 135.
Cooke, M. C. Introduction to the Study of Fungi, 416.
Cope, E. D. The Primary Factors of Organic Evolution, 707.
Corrigan, Severinus J. The Constitution and Functions of Gases, etc., 279.
Curtis, H. Holbrook. Voice Building and Tone Placing, 707.
Davis, William M. The Physical Geography of Southern New England, 278.
Davis, William T. Staten Island Names, 851.
Eggleston, Edward. Stories of American Life and Adventure, 419.
— Stories of Great Americans for Little Americans, 419.
Eldridge, George H. A Geological Reconnoissance in Northwest Wyoming, 279.
Ethnologisches Notizblatt, 135.
Evans, Arthur J. Cretan Pictographs and Præ-Phœnician Script, 277.
Ferri, Enrico. Criminal Sociology, 272.
Fisher, J. H. Hypnotism and its Relation to Witchcraft, Ghostology, and Mind-cure, 851.
Fletcher, W. I., and R. R. Bowker. The Annual Literary Index for 1895, 853.
Flower, Sydney. A Study in Hypnotism, 851.
Foster, G. C., and E. Atkinson. Elementary Treatise on Electricity and Magnetism, 565.
Geology of Moriah and Westport Townships, 851.
Giddings, Franklin Henry. The Principles of Sociology, 708.
Glazebrook, R. T. James Clerk Maxwell and Modern Physics, 418.
— Mechanics, 566.
Green, M. E. Food Products of the World, 134.
Griswold, W. M. A Descriptive List of Books for the Young, 279.
Hadley, Arthur T. Economics, 850.
Hall, Lyman. Algebra, 709.
Hammel, William C. A. Observation Blanks in Physics, 278.
Hart, Ernest. Hypnotism, Mesmerism, and the New Witchcraft, 851.
Harvard College Observatory, Annals. Vol. XXXIV, Vol. XL, Part IV, Vol. XLI, Part III, 418.
Hayes, C. W. The Southern Appalachians, 278.
Heffley, Norman P. Manual of Phonography, 417.
Hiorns, Arthur H. Principles of Metallurgy, 565.
Holman, S. W. Computation Rules and Logarithms, 419.
Home Study, 854.
Home Study Review, 708.
Hornbrook, A. R. Concrete Geometry, 708.
Hornby, J. Gas Manufacture, 708.
Hudson, W. H. British Birds, 131.
Illinois Board of Commissioners of Labor. Report on Coal in Illinois, 420.
— Bureau of Labor Statistics. Eighth Biennial Report, 420.
Incorporated Society for Psychical Research. Proceedings. Part XXIX, 417.
Jameson, Charles D. Portland Cement, 419.
Keene, G. A. Hypnotism, 852.
Keiser, Edward H. Laboratory Work in Chemistry, 565.
Keller, I. Bilder aus der deutschen Litteratur, 420.
King, Robert M. School Interests and Duties, 709.
Kinsley, William W. Old Faiths and New Facts, 566.
Knauff, Theodore C. A Dissatisfied Farmer, 852.
Knobel, Edward. The Night Moths of New England, 278.
Legislation by States in 1895, 853.
Le Plongeon, Augustus. Queen Móo and the Egyptian Sphinx, 848.
Light on Current Topics, 420.
Lodeman, E. G. The Spraying of Plants, 275.
Marcou, Jules. Life, Letters, and Works of Louis Agassiz, 273.
Marey, E. J. Movement, 130.
Maryland State Weather Service. The Climatology and Physical Features of Maryland, 278.
Matthews, Brander. American Literature, 709.
Mercer, Henry C. The Hill Caves of Yucatan, 277.
Michigan State Agricultural College. Farmers' Institutes, 418.
Mitford, A. B. Freeman. The Bamboo Garden, 854.
Mosso, Angelo. Fear, 846.
Needham, James G. Elementary Lessons in Zoölogy, 133.
New Jersey. Report of the State Geological Survey for 1894, 135.
New York Academy of Sciences. Transactions. 1894–'95, 279.
— — State Agricultural Experiment Station. Thirteenth Annual Report, 709.
Ostwald, Wilhelm. The Scientific Foundations of Analytical Chemistry, 132.
Pensiero Moderno, Il. No. 1, 135.
Remsen, Ira, and Wyatt W. Randall. Chemical Experiments, 136.

Books noticed:

PAGE

Revista della Beneficenza Publica delle Istituzioni di Providenza e di Igiene Sociale. No. 1, 135.
Risteen, A. D. The Molecular Theory of Matter, 419.
Robb, Russell. Electric Wiring, 564.
Romanes, Mrs. Ethel. The Life and Letters of George John Romanes, 415.
Romanes, G. J. Examination of Weismannism, 852.
Roth, Filibert. Timber, 417.
Rusby, Henry H., and Smith E. Jelliffe. Essentials of Vegetable Pharmacognosy, 134.
Schoenhof, J. A History of Money and Price, 705.
Schultz, Frederick W. Politics and Patriotism, 566.
Schützenberger, P. Les Fermentations, 416.
Secret of Mankind, The, 420.
Sedgwick. The Cambridge Natural History. Vol. V, 133.
— and Wilson. Introduction to General Biology, 134.
Seeley, H. G. The Story of the Earth in Past Ages, 132.
Simson, James. Discussions on the Gypsies, 135.
— Social Emancipation of the Gypsies, 135.
Sizer, Nelson. How to Study Strangers, 280.
Smith, George H. The Theory of the State, 565.
Smith, Oberlin. Press Working of Metals, 854.
Spencerian Penmanship. Shorter Course in Vertical Writing, 709.
Stanley, William Ford. Notes on the Nebular Theory, 133.
Stoddard, Charles A. Cruising among the Caribbees, 279.
Sully, James. Studies of Childhood, 563.
Taussig, F. W. Wages and Capital, 849.
Terrestrial Magnetism. Vol. I, No. 1, 418.
Textor, Lucy E. Official Relations between the United States and the Sioux Indians, 700.
Thompson, C. J. S. The Chemist's Compendium, 418.
Turpin, G. S. Practical Inorganic Chemistry, 417.
Tyler, John M. The Whence and the Whither of Man, 564.
Tyndall, John. The Glaciers of the Alps, 706.
Union College Practical Lectures, 852.
United States Commission to the Columbian Historical Exposition at Madrid, 421.
— — Commissioner of Education. Report for 1892–'93, 418.
— — Bulletin of the Department of Labor, No. 1, 135.
— — Interstate Commerce Commission. Statistics of Railways in the United States, 420.
University of Tokyo. The Journal of the College of Science. Vol. VIII, Part II, Vol. IX, Part I, 278.
Vulté, H. T., and George M. S. Neustadt. Laboratory Manual of Inorganic Preparations, 278.
Welch, Deshler. The Bachelor and the Chafing Dish, 418.
White, Andrew D. History of the Warfare of Science with Theology in Christendom, 560.
Whiteley, R. Lloyd. Organic Chemistry: the Fatty Compounds, 134.
Williams, H. Slater. Geological Biology, 276.
Williams, R. P. Chemical Experiments, 416.
Wright, G. Frederick, and Warren Upham. Greenland Icefields and Life in the North Atlantic, 275.
Wurtz, Adolphe. Elements of Modern Chemistry, 279.
Zahm, J. A. Evolution and Dogma, 414.

Bostedo, L. G. Character-Building and the Environment. (Corr.) .. 407
Botanical Garden, Natural. (Frag.) 713
Business Depression, Present. (Frag.) 712

Cacao Cultivation in Mexico. (Frag.) 718
Cambodian Primary School, A. A. Leclère 688
Camphor. (Frag.) 715
Carter, J. M. G. A Correction. (Corr.) 842
Cell, Some Modern Views of the.* J. E. Humphrey 603
Chamacocos. (Frag.) 430
Character-Building and the Environment. (Corr.) L. G. Bostedo 407
Clapp, Henry L. The Educative Value of Children's Questioning 799
Clozel, F. J. The Banziris of the Congo Basin 673
Cobb, Collier. Some Beginnings in Science.* 763
Communion Cups, Individual. (Frag.) 424

PAGE
Conspiracy of Silence, An Alleged. (Table) 411
Cordite. (Frag.) 859
Correction, A. (Corr.) J. M. G. Carter 842
Crime, Immigration and. S. G. Fisher 625
Criminal, Professional. (Frag.) 429
Cuba, Physical Characteristics of. (Frag.) 573
Curtius, Prof. Ernst, Death of. (Frag.) 859
Customs, Marriage, of the Shans. (Frag.) 426
" War, Old Madagascar. (Frag.) 856
" " Some African. (Frag.) 860

Dana, Samuel Luther, Sketch of. (With Portrait) 692
Daubrée. (Frag.) 718
De Graffenried, Clare. The "New Woman" and her Debts 664
Decimal Computation. (Table) 267
Disease, Preventing the Spread of. (Corr.) J. F. C. Lewis 699
" Serum Treatment of. (Frag.) 282
Dogbane and Milkweed. Maud Going 684
Dragon-flies, Convention of. (Frag.) 570
Drawing Upside Down. (Frag.) 861
Drought, Commerce and. (Frag.) 137

Education, a Literary, Natural Science in. A. H. Tolman 98
" Competition Fetich in. (Frag.) 713
" Modern, The Aim of. C. H. Henderson 485
Educational Institutions, Co-ordination of Our. E. H. Magill 176
Educative Value, The, of Children's Questioning. H. L. Clapp 799
Elevation Areas, New Classification of.* (Frag.) 855
Ethical Education, Sociology in. B. C. Mathews 373
Ethics, Scientific, Regeneration and. (Table) 127
Evans, E. P. Sketch of Jacob Moleschott. (With Portrait) 399
Evolution, Horticulture an Object Lesson in. (Frag.) 573
Exaggeration as an Æsthetic Factor. F. Regnault 821
Expert Witness. (Frag.) 712

Ferri, Enrico, on Homicide. H. Zimmern 678, 828
Fisher, Sydney G. Immigration and Crime 625
Fly, Tsetse. (Frag.) 423
Flying, Recent Experiments in. (Frag.) 142
Food, Bamboo as a. (Frag.) 138
Frogs and their Uses.* R. W. Schufeldt, M. D 179

Geography in the Middle Ages. (Frag.) 717
Genius, The, and his Environment. J. M. Baldwin 312, 522
Glass Construction, New. (Frag.) 139
Gout and Genius. (Frag.) 140
Graham, Douglas, M. D. Massage in Sprains, Bruises, and Dislocations 381

Hale, William Henry. Early Years of the American Association* .. 501
Hardinge, Miss E. M. Dogbane and Milkweed 684

PAGE
Harley, Lewis R. Science at the University of Pennsylvania* 440
Heilprin, Angelo. The Stone Forest of Florissant* 479
Henderson, C. Hanford. The Aim of Modern Education 485
Hirsch, William. Epidemics of Hysteria 544
Hodge, C. F. The Vivisection Question 614, 771
Holidays, Summer. (Table) 408
Homicide, Enrico Ferri on. H. Zimmern 678, 828
Honeydew, Origin of. (Frag.) 717
Horse Racing in Bosnia. (Frag.) 718
Humphrey, James Ellis. Some Modern Views of the Cell* 603
Huxley, Professor, A Bishop on. (Table) 699
Hysteria, Epidemics of. W. Hirsch 544

Ice Age, Causes, Stages, and Time of the.* W. Upham 354
Identification, Finger-print Method of. (Frag.) 284
Iles, George. Why Progress is by Leaps 216
Illusions and Hallucinations. W. R. Newbold 630
Insects, Social.* L. N. Badenoch 641

Jordan, David Starr. The Sympsychograph: a Study in Impressionist Physics* 597

Kekulé, August. (Frag.) 861
Kelvin's, Lord, "Failure." (Table) 701
Kraepelin, Emil. A Measure of Mental Capacity 756

Lake, Toba. (Frag.) 429
Lakes, the Great, How they were Built.* J. W. Spencer 157
Leaves, The Significance of.* F. S. Mathews 793
Leclère, Adhémard. A Cambodian Primary School 688
Le Plongeon, Alice D. The Potter's Art among Native Americans*. 646
Lewis, Mrs. Julia F. Carvill. Preventing the Spread of Disease 699
Light-bearing Cephalopods. (Frag.) 572
Lightning, Sheet, Theory of. (Frag.) 572
Llano, Antonio. Professor Ostwald on the Mechanical Theory. (Corr.) 121
Lloyd, Charles Edward. Sketch of Henry Augustus Rowland.* (With Portrait) 110
Luce, Grace A. Occupations, Privileges, and Duties of Women. (Corr.) 698

Macbride, Thomas H. County Parks 369
Macdougal, D. T. The Physiology of Color in Plants* 71
McPherson, Logan G. On Our Banking System 327
" " The Development of the Monetary Problem .. 20
" " The Monetary Problem 202
Madagascar, Curious Verbal Customs in. (Frag.) 285
Magill Edward H. Co-ordination of our Educational Institutions ... 176
Mankind, The Proposed Dual Organization of. W. G. Sumner 433
Massage in Sprains, Bruises, and Dislocations.* D. Graham, M. D ... 381
Mather, Fred. The Scallop* 534

PAGE
Mather, William Williams, Sketch of. (With Portrait)..... 550
Mathews, Byron C. Sociology in Ethical Education..... 373
Mathews, F. Schuyler. The Significance of Leaves*..... 793
Meats, Nutritive Value of. (Frag.)..... 560
Mechanical Theory, Professor Ostwald on the. (Corr.) A. Llano... 121
Mendenhall, T. C. The Metric System..... 721
Mental Capacity, A Measure of. E. Kraepelin..... 756
Metric System, Mr. Spencer and the, again. (Table)..... 410
" " The. H. Spencer..... 186
" " " T. C. Mendenhall..... 721
Micronesia. (Frag.)..... 286
Mocker, Our Southern.* I. W. Blake..... 258
Moleschott, Jacob, Sketch of. (With Portrait.) E. P. Evans..... 399
Monetary Problem, The. L. G. McPherson..... 202
" " The Development of the. L. G. McPherson..... 20
Murdoch, John. Dr. Nansen's "Throwing Stick."..... 173

Nansen's, Dr., "Throwing Stick." J. Murdoch..... 173
Nevada Silver.* C. H. Shinn..... 734
Newbold, William Romaine. Illusions and Hallucinations..... 630
" " " Posthypnotic and Criminal Suggestion 230
" " " "Spirit" Writing and "Speaking with Tongues"..... 508
" " " Suggestion in Therapeutics..... 342
" " " The Self and its Derangements..... 810
Niagara as a Timepiece.* J. W. Spencer..... 1

Obituary Notes. Ludwig Rütimeyer..... 144
John Russel Hind, Adalbert Krueger..... 432
Daubrée..... 576
Cristoforo Negri..... 720
Lord Lilford, Sir Joseph Prestwich..... 862
Lord Lilford, Heinrich Ernst Beyrich, Sir William Grove..... 864
Odors, Measure for. (Frag.)..... 858
Old Skull, New. (Frag.)..... 424
Opium is prepared, How. (Frag.)..... 284
Outerbridge, A. E., Jr. Pending Problems for Wage-Earners..... 57

Paints for Iron. (Frag.)..... 860
Parks, County. T. H. Macbride..... 369
Patriotism and Militarism. (Table.)..... 122
Pearls and Mother-of-Pearl. C. S. Pratt..... 390
Peary Expedition, Scientific Acquisitions from the. (Frag.)..... 286
Petroleum-lamp Accidents. (Frag.)..... 282
Photographing Electrical Discharges.* W. E. Woodbury..... 305
Plant Breeding. (Frag.)..... .. 859
Plants, Alpine, Characteristics of. (Frag.)..... 570
" The Physiology of Color in.* D. T. Macdougal..... 71
Polar Expeditions, The Year's. (Frag.)..... 856
" Exploration, Continuous, Proposed System of. (With Map.) R. Stein..... 321

PAGE
Poor, Do the, hate the Rich? (Frag.) 714
Pratt, Charles Stuart. Pearls and Mother-of-Pearl 390
Progress is by Leaps, Why. G. Iles 216
Psychology of Puppies. (Frag.) 427
Public Service, Intelligence in the. (Table) 266
Pygmy, The, in the United States.* J. Weir, Jr., M. D 47

Raymond, Paul. The Subterranean River Midroï* 253
Regnault, F. Exaggeration as an Æsthetic Factor 821
Rice, Japanese. (Frag.) 426
Richards, Harriet E. The Birds at Dinner* 337
River Midroï, The Subterranean. P. Raymond 253
Robinson Crusoe, Discoverer of. (Frag.) 427
Rogers, James Blythe, Sketch of. (With Portrait) 261
Rogers, Robert Empie, Sketch of. (With Portrait) 837
Röntgen Ray, The. (Table) 125
Rowland, Henry Augustus, Sketch of.* (With Portrait) C. E. Lloyd 110

Scallop, The.* F. Mather 534
School Conditions and Eyesight. (Frag.) 862
Schools, Elementary, Another Bishop on Science Teaching in. (Table) 843
" Public, The Devil in the. (Table) 559
Science at the University of Pennsylvania.* L. R. Harley 440
" Some Beginnings in.* C. Cobb 763
" The Province of. (Table) 268
Self, The, and its Derangements. W. R. Newbold 810
Serum Therapy and Blood Brotherhood. (Frag.) 423
Shinn, Charles Howard. Nevada Silver* 734
Shufeldt, R. W., M. D. Frogs and their Uses* 179
Silk from Wood. (Frag.) 855
Sisal in the Bahamas. (Frag.) 428
Sounding, Deepest, yet made. (Frag.) 285
Sparrows, Ways of. (Frag.) 714
Spencer, Herbert. The Metric System 186
Spencer, J. W. How the Great Lakes were Built* 157
" " Niagara as a Timepiece* 1
Spider Bites, Poisonous. (Frag.) 857
"Spirit" Writing and "Speaking with Tongues." W. R. Newbold .. 508
Steel, Mysterious Fractures in. (Frag.) 422
Stein, Robert. Proposed System of Continuous Polar Exploration. (With Map.) 321
Stone Forest, The, of Florissant.* A. Heilprin 479
Storage Battery, Evolution of the. (Frag.) 715
Storms, Dust and Sand, in the West. J. A. Udden 655
Suggestion in Therapeutics. W. R. Newbold 342
" Posthypnotic and Criminal. W. R. Newbold 230
Sumner, William G. The Proposed Dual Organization of Mankind .. 433
Sympsychograph, The: a Study in Impressionist Physics.* D. S. Jordan 597

PAGE
Talbot, George F. The Political Rights and Duties of Women..... 80
Taxation, Principles of. D. A. Wells..... 29, 145, 289, 464, 577
Temperature, Low, Apparatus, New. (Frag.)..... 283
Temperatures, Underground, Some New Observations on. (Frag.)... 281
Tolman, Albert H. Natural Science in a Literary Education..... 98
Tuberculosis and Meat Inspection. (Frag.)..... 138
Tweedy, Miss Alice B. Woman and the Ballot..... 241
" " " Woman's Claims to the Ballot. (Corr.)..... 842

Udden, J. A. Dust and Sand Storms in the West..... 655
Underground Houses of Techin, Tunisia. (Frag.)..... 858
Upham, Warren. Causes, Stages, and Time of the Ice Age*..... 354
Uranium. (Frag.)..... 569

Vegetation, Relations of Moisture and. (Frag.)..... 716
Vivisection Question, The. C. F. Hodge..... 614, 771

Wage-Earners, Pending Problems for. A. E. Outerbridge, Jr..... 57
Water, Infected Drinking. (Frag.)..... 283
" Purification, Metallic Iron in. (Frag.)..... 141
Weir, James, Jr., M. D. The Pygmy in the United States*..... 47
Wells, David A. Principles of Taxation. II. The Place of Taxation in Literature and History..... 29, 145, 289, 464, 577
Wells, Holy. (Frag.)..... 571
Woman and the Ballot. A. B. Tweedy..... 241
" Occupations, Privileges, and Duties of. (Corr.) G. A. Luce. 698
" The New, and her Debts. C. de Graffenried..... 664
Woman's Claims to the Ballot. (Corr.) A. B. Tweedy..... 842
Women and Politics. (Table)..... 556
" The Political Rights and Duties of. G. F. Talbot..... 80
" Tibetan. (Frag.)..... 139
Woodbury, Walter E. Photographing Electrical Discharges*..... 305
Woodpeckers, A Word in Favor of. (Frag.)..... 573

X Rays in Surgery. (Frag.)..... 711
" Recent Work on the..... 103
" Those Blessed. (Table)..... 271

Youmans, V. J. Acetylene, the New Illuminant..... 786

Zimmern, Helen. Enrico Ferri on Homicide..... 678, 828

THE END.